

## REMARKS

In the interest of simplifying the prosecution of the present Application, all pending claims have now been canceled and new Claims 40-61 submitted for consideration. Applicants contend no new matter has been added in the new claims and a detailed discussion of any added matter is provided below.

### I. Priority

Applicants submit that for the purposes of responding to the rejections set forth in the pending Office Action, Applicants believe they are not required to prove an effective filing date earlier than March 19, 1999. However, Applicants reserve the right to provide a showing establishing an earlier effective date for one or more claims when required to do so.

### II. IDS

Applicants note the IDS and accompanying references were submitted by their former patent firm. Applicants have requested a copy of the reference from their former patent representatives and will provide a copy of Reference A2 when it is received from the firm.

### III. Rejections Under 35 USC 112, 2<sup>nd</sup> Paragraph

Applicants believe all the grounds for the rejections of Claims 12, 17-19 and 38 no longer apply since the alleged indefinite language no longer appear in the newly submitted claims.

### IV. Rejections Under 35 USC 112, 1<sup>st</sup> Paragraph

The formerly pending claims stand rejected under 35 U.S.C. 112, first paragraph, for the reasons set forth by the Examiner in Paragraphs 9-13 of the pending Office Action. Solely in an effort to expedite the prosecution of this Application, Applicants have submitted new claims that contain amendments either suggested by the Examiner or in response to the Examiner's grounds for rejecting the claims.

#### A. Percent Identity

As suggested by the Examiner on page 7 of the pending Office Action, Applicants have limited the newly submitted claims to variations having at least about 95% identity over the full length of the listed sequences and testable functional activity (e.g. eliciting an immune response

or stimulating T cell proliferation). Support for the 95% identity can be found in the specification, for example, on page 23, line 26 through page 25, line 7. The testable functional activity language is supported in the specification, for example, on page 10, lines 9-12 and in Example 4. Thus, no new matter has been added in the newly submitted claims.

**B. “Fragments Comprising”**

Although Applicants believe the language of the formerly pending claims was sufficiently described and enabled, Applicants have nevertheless submitted new fragment claims using the more closed “consisting of” language and consistent with claims allowed by the Examiner in other non-related applications.

**C. Allelic Variants**

The newly submitted claims relating to allelic variants are now coupled to testable functional language (e.g. elicits an immune response to canine or feline B7-2 protein or stimulates T cell proliferation). Applicants submit that it would not require undue experimentation for one skilled in the art to use the teachings provided in the specification regarding what they contemplate as allelic variants (see e.g., page 13, line 23 through page 14, line 14 of the specification) and simply test them for the claimed function (e.g. stimulation of T cell proliferation, Example 4 pages 59-60).

**D. Mammalian B7-2 Proteins**

Although Applicants believe the specification sufficiently describes and enables for all mammalian species of B7-2 proteins, Applicants have nevertheless only submitted new claims that relate to canine and feline B7-2 proteins and nucleic acids in order to expedite the prosecution of this Application.

**E. Other Grounds of Rejection under 112, 1<sup>st</sup> paragraph**

In Paragraph 11 of the pending Office Action, Claims 6, 10-14, 16-19, 26-27 and 37-38 stand rejected as reciting a “therapeutic composition.” Although Applicants believe sufficient teaching has been provided in the specification, new Claim 50 is directed to a composition containing the claimed nucleic acid molecules and an excipient. Support for “excipient” can be

found in the specification, for example, on page 40, line 25 through page 41, line 7. Accordingly, no new matter has been added by new Claim 50.

In Paragraph 12 of the pending Office Action, Claims 8, 14 and 26 are rejected for including complementary sequences to express a B7 protein. Applicants have attempted to delete complementary sequences in the newly submitted claims for sequences that express a B7-2 protein.

Finally, in Paragraph 13 of the pending Office Action, Claim 12 is rejected for lack of enablement. Applicants, however, direct the Examiner's attention to the Examples for repeatable methods of obtaining such plasmids. In addition, Applicants have used sequence identification numbers in place of the in-house designations as suggested by the Examiner. Thus, it would not be undue experimentation for one skilled in the art to obtain the nucleic acid molecules from the disclosed sequences.

#### V. Rejections Under 35 U.S.C. 102

Claims 1-3, 6, 8, 10-11, 13-14, 16-17, 19, 23, 25, 27 and 37 stand rejected as being anticipated by Maher et al. Applicants submit the newly submitted claims are novel since they are directed to canine and feline B7-2 molecules, while Maher et al. describe porcine B7-2. Thus, the Maher et al. reference does not anticipate the new claims.

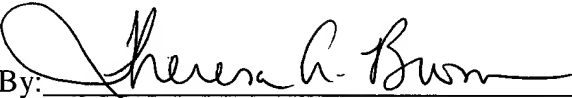
Claims 1-3, 6, 8, 10-11, 13-14, 16-19, 21, 23, 25-27 and 37-38 also stand rejected under 102(e) as being anticipated by the Collisson et al. publication. Applicants, however, note the filing date of the Collisson et al. application is April 30, 1999, whereas the international filing date of the instant Application is April 19, 1999. Thus, even if the effective filing date of the instant Application is as assigned by the Examiner (i.e., April 19, 1999), the effective filing date predates the filing date of the Collisson et al. application. Accordingly, the Collisson et al. application is not a proper 102(e) reference against the pending claims.

VI. Conclusion

In light of the amendments and remarks above, Applicants request the withdrawal of all rejections and solicit an allowance of the newly submitted claims. The Examiner is invited to contact the undersigned should any issues remain.

Respectfully submitted,

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